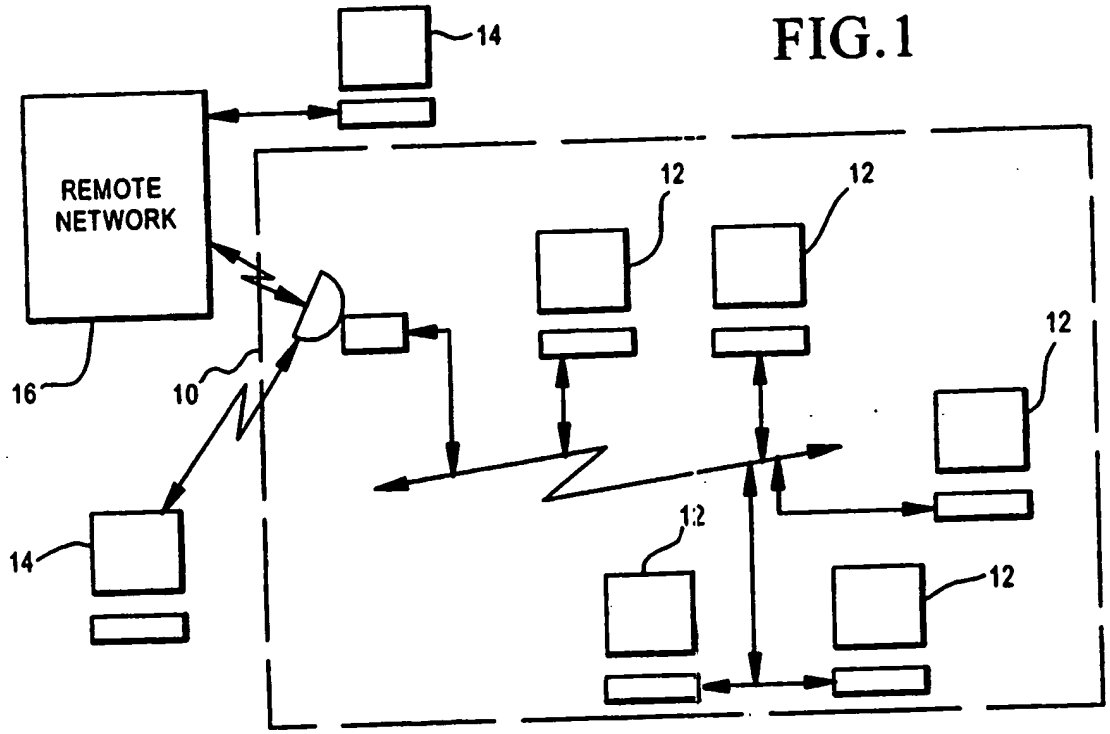
FIG.1



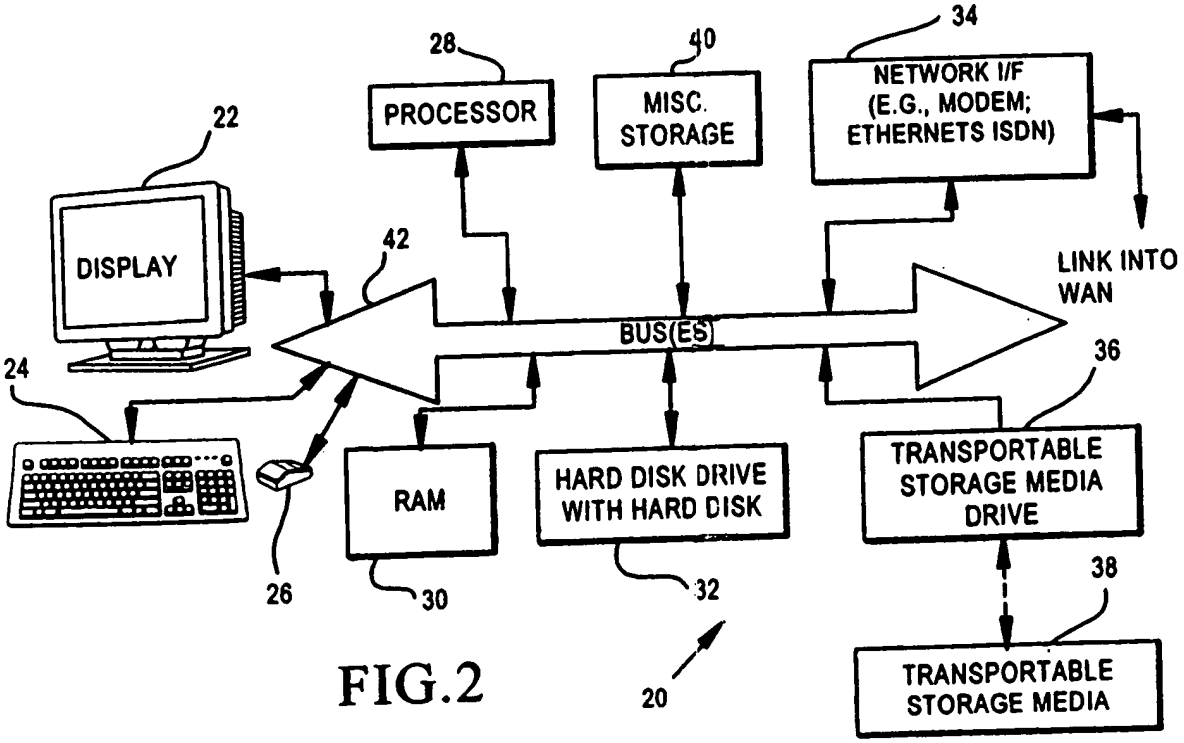


FIG.2

BEST AVAILABLE COPY

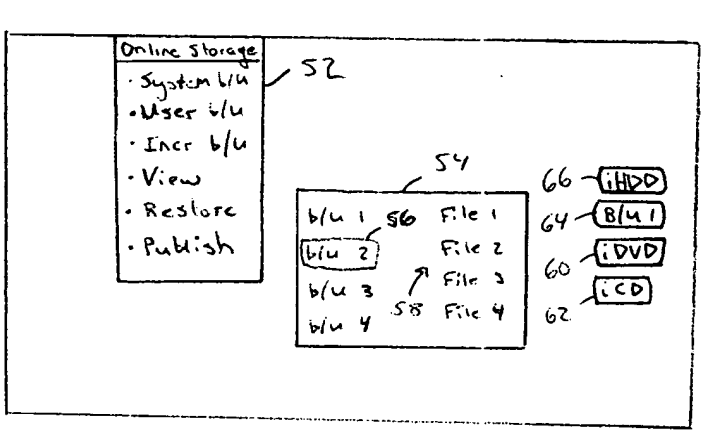


Fig. 3

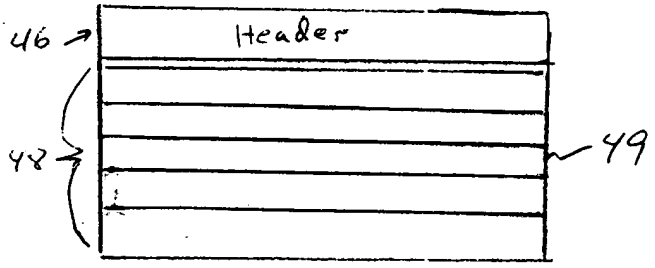


Fig. 4

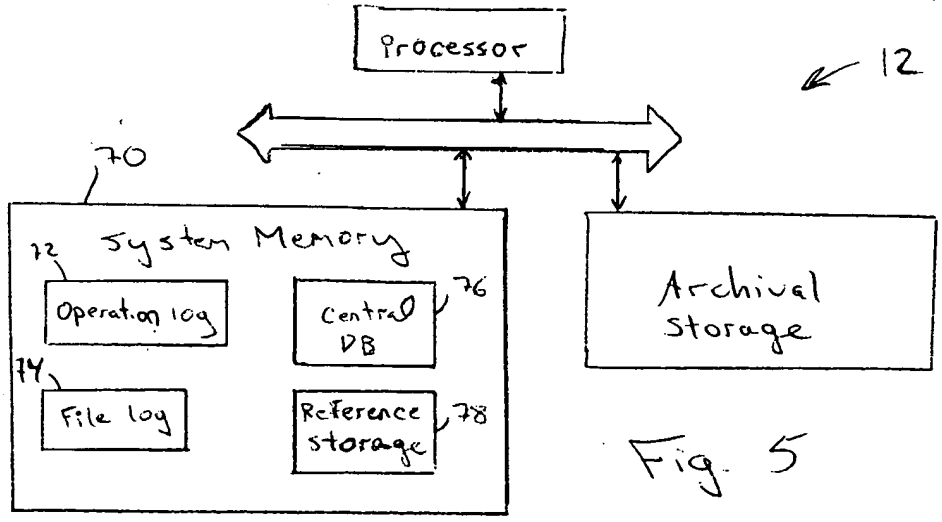


Fig. 5

BEST AVAILABLE COPY

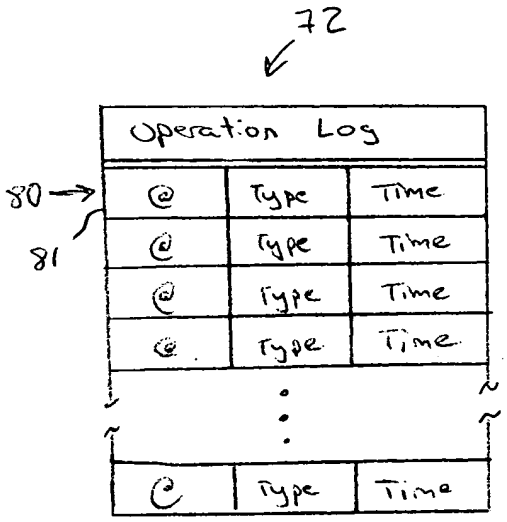


Fig. 6

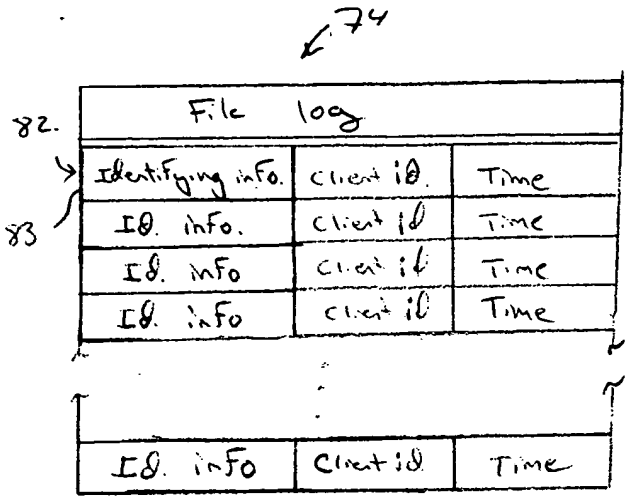


Fig. 7

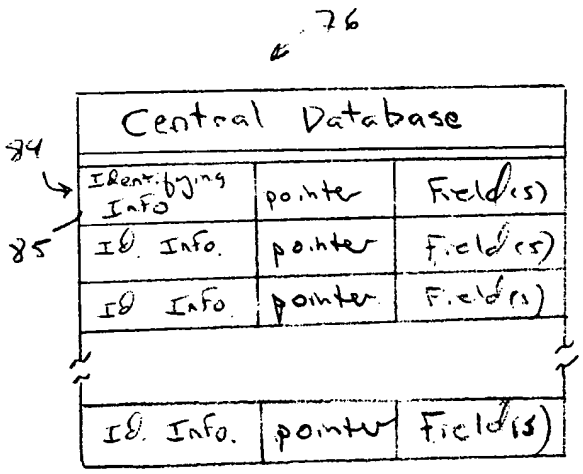


Fig. 8

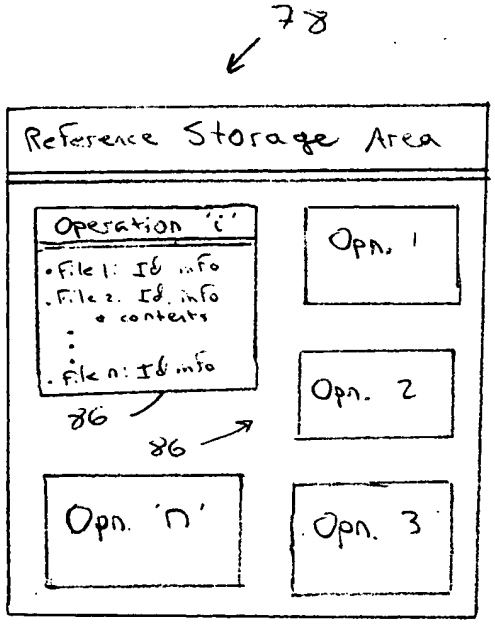


Fig. 9

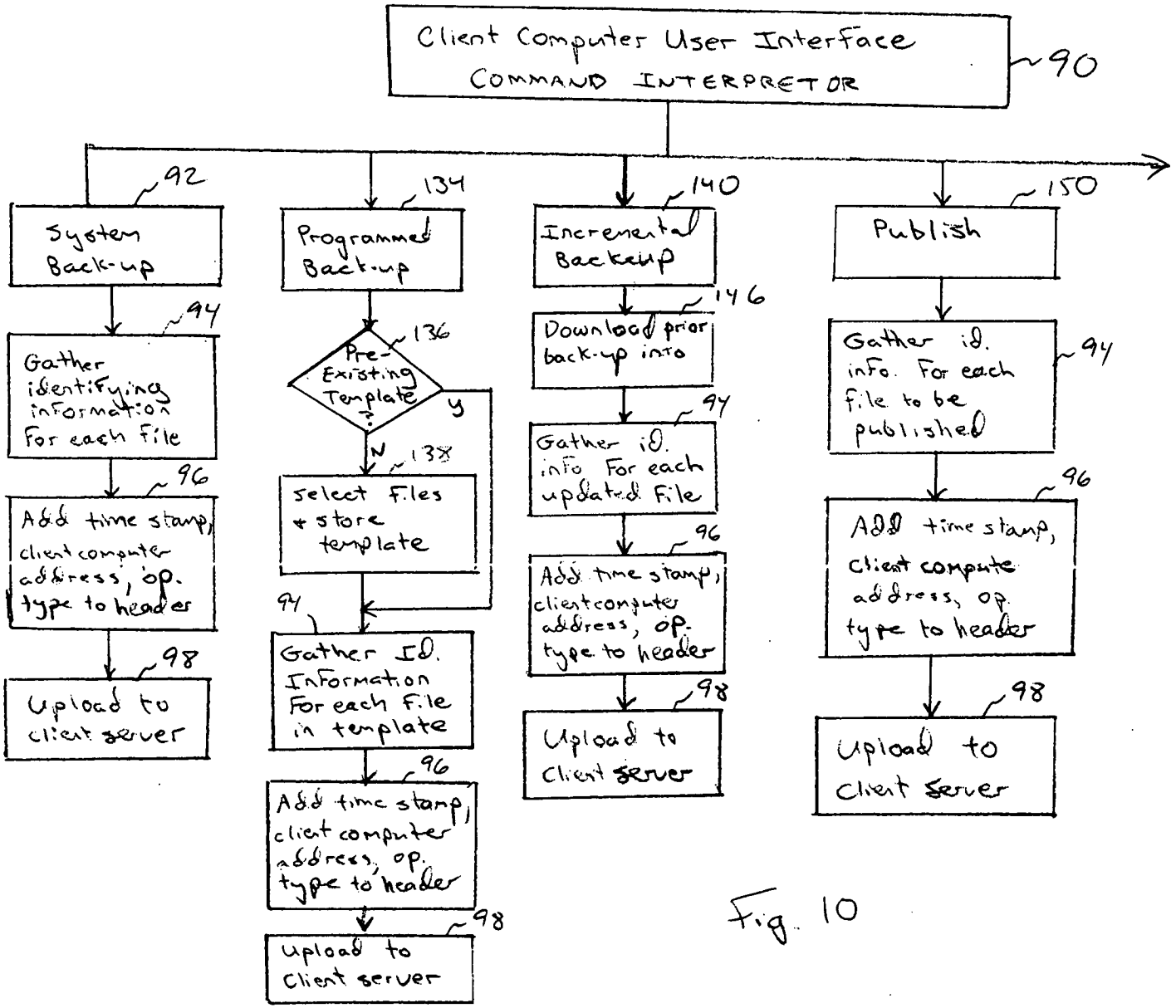

Client Computer User Interface
COMMAND INTERPRETOR
90
92
System Back-up
94
Gather identifying information For each file
96
Add time stamp, client computer address, op. type to header
98
Upload to client server
134
Programmed Back-up
136
Pre-Existing Template ?
Y
N
138
Select Files + store template
94
Gather Id. Information For each File in template
96
Add time stamp, client computer address, op. type to header
98
Upload to Client server
140
Incremental Backup
146
Download prior back-up into
94
Gather id. info For each updated File
96
Add time stamp, client computer address, op. type to header
98
Upload to Client server
150
Publish
94
Gather id. info. For each file to be published
96
Add time stamp, client compute address, op. type to header
98
Upload to client server

Fig. 10

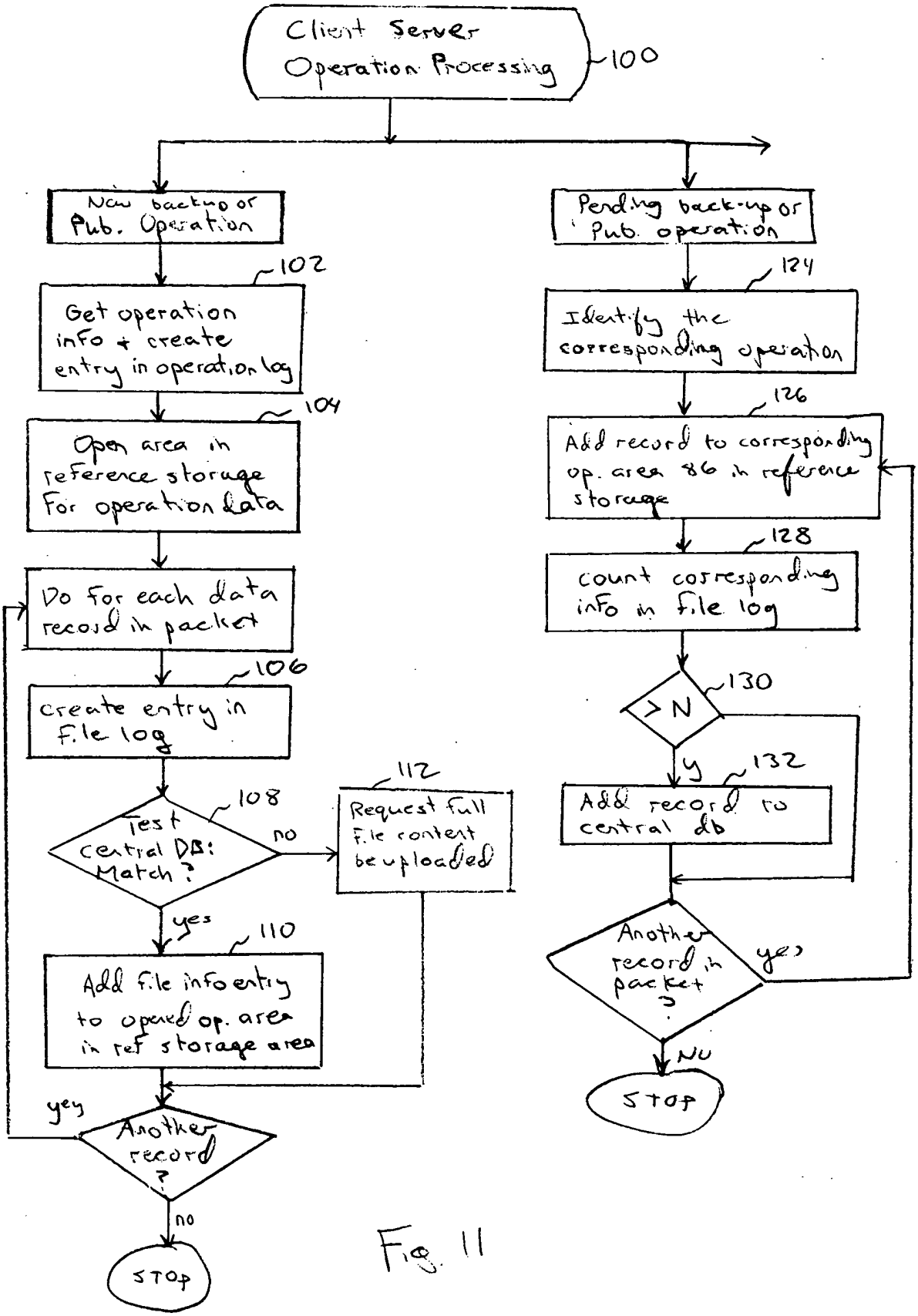

Client Server Operation Processing
100
New backup or Pub. Operation
Pending back-up or Pub. operation
102
Get operation info + create entry in operation log
104
Open area in reference storage For operation data
Do For each data record in packet
106
create entry in file log
108
Test central DB: Match?
no
yes
112
Request full file content be uploaded
110
Add file info entry to opened op. area in ref storage area
yes
Another record?
no
STOP
124
Identify the corresponding operation
126
Add record to corresponding op. area 86 in reference storage
128
count corresponding info in file log
130
> N
y
132
Add record to central db
Another record in packet?
yes
NO
STOP

Fig. 11

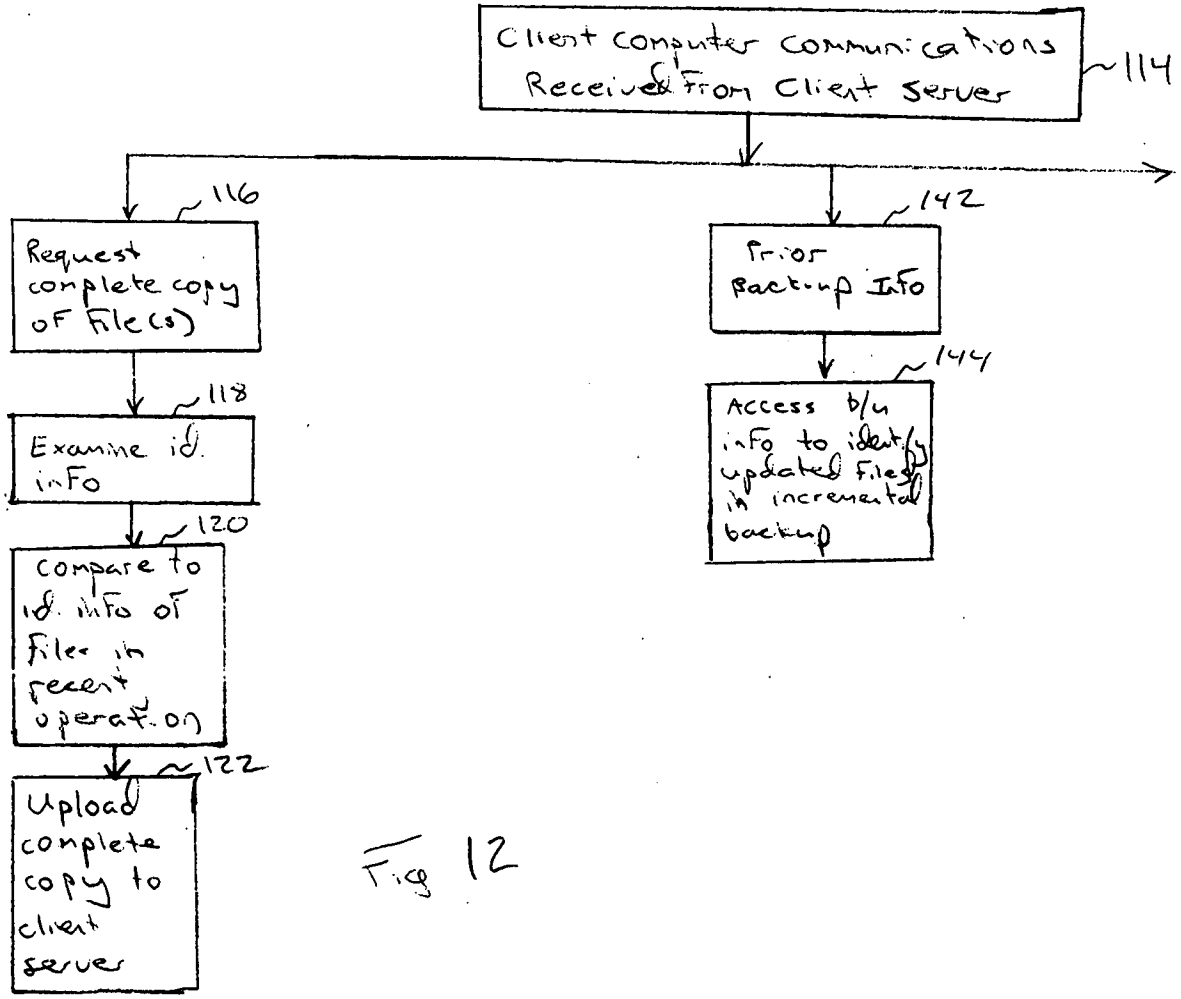

Client computer communications Received From Client server
114
116
Request complete copy of file(s)
118
Examine id. info
120
Compare to id. info of files in recent operation
122
Upload complete copy to client server
142
Prior Backup Info
144
Access b/u info to identify updated files in incremental backup

Fig 12

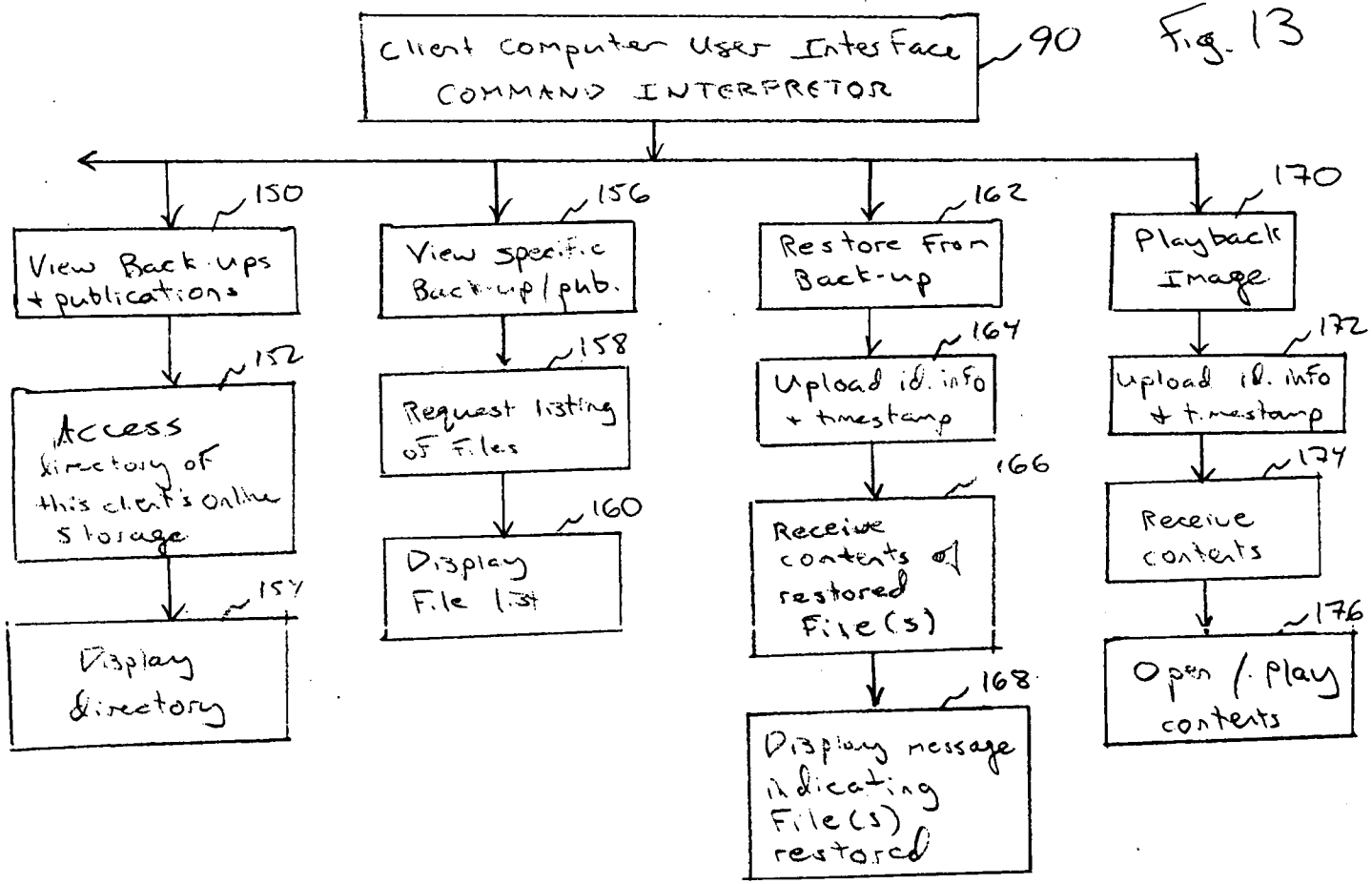

Client computer User Interface
COMMAND INTERPRETOR
90
150
View Back-ups + publications
152
Access directory of this client's Online storage
154
Display directory
156
View specific Back-up/pub.
158
Request listing of Files
160
Display File list
162
Restore From Back-up
164
Upload id. info + timestamp
166
Receive contents of restored File(s)
168
Display message indicating File(s) restored
170
Playback Image
172
Upload id. info + timestamp
174
Receive contents
176
Open / play contents

Fig. 13

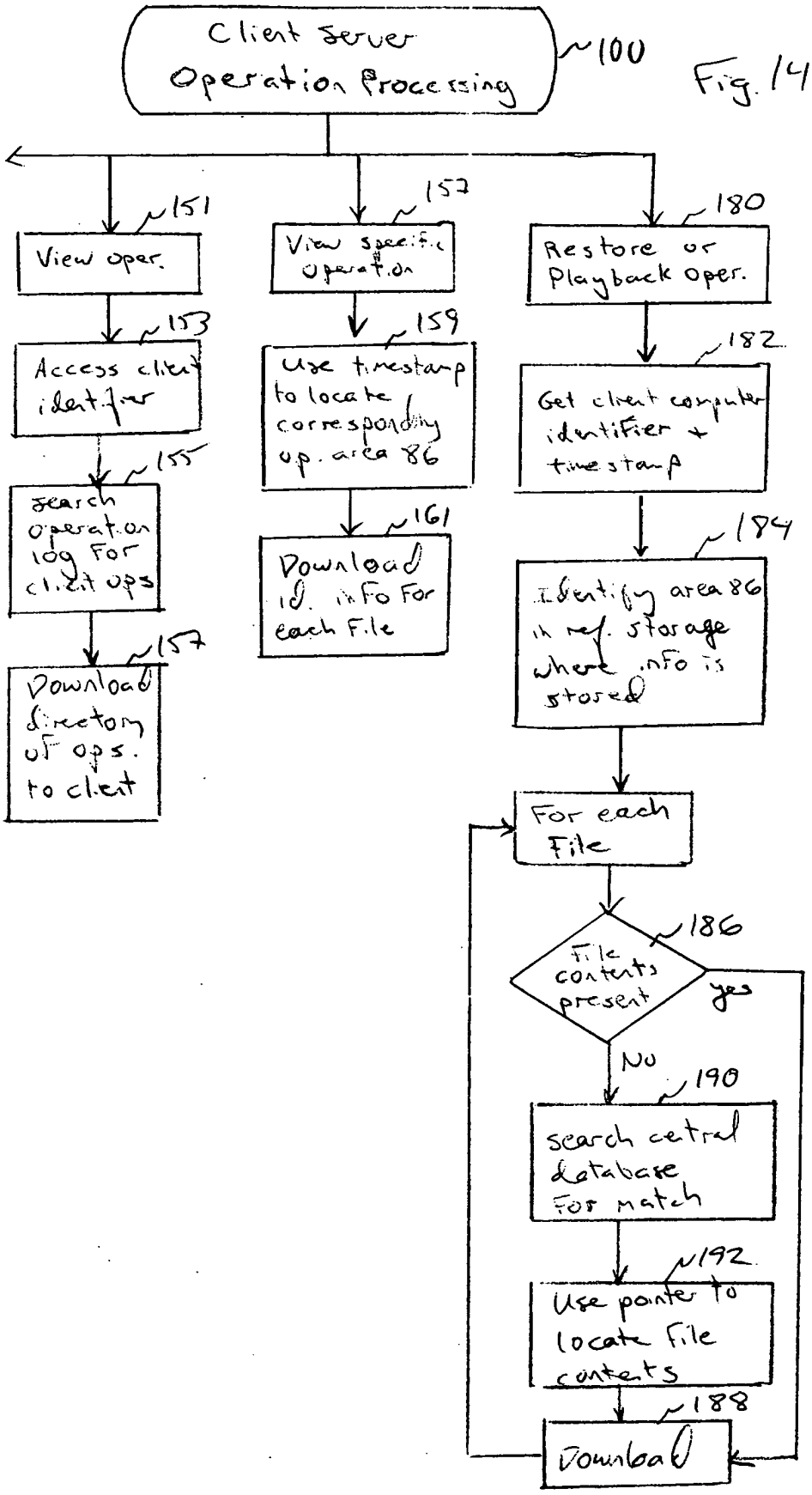

Client Server Operation Processing
100
Fig. 14
151
View oper.
153
Access client identifier
155
Search operation log For client ops
157
Download directory of ops. to client
152
View specific operation
159
Use timestamp to locate corresponding op. area 86
161
Download id. info For each File
180
Restore or Playback oper.
182
Get client computer identifier + timestamp
184
Identify area 86 in ref. storage where info is stored
For each File
186
File contents present
yes
No
190
search central database For match
192
Use pointer to locate file contents
188
Download

Fig. 15

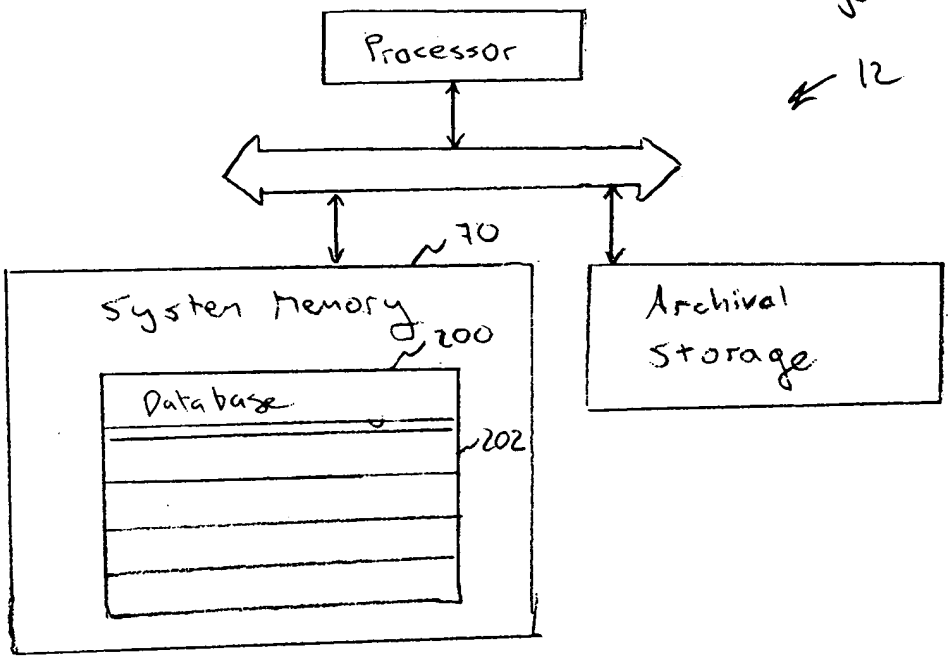
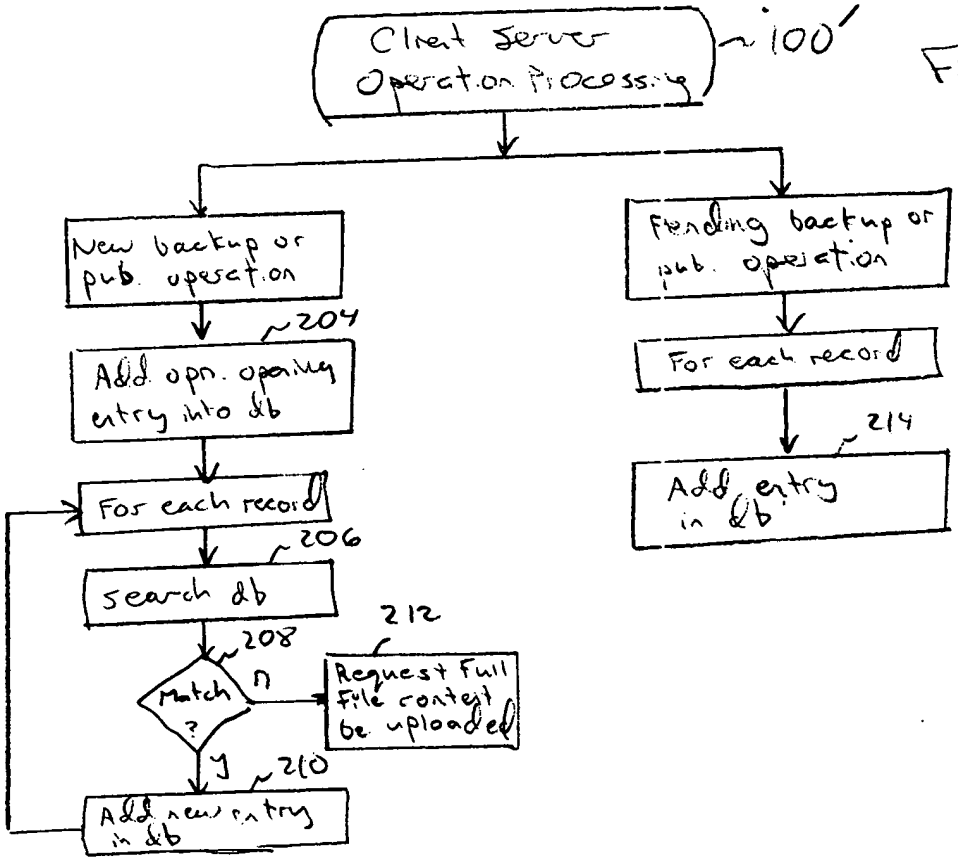

Processor
12
70
System Memory
200
Database
202
Archival Storage

Fig. 16


Client Server Operation Processing
100'
New backup or pub. operation
Pending backup or pub. operation
204
Add opn. opening entry into db
For each record
For each record
214
Add entry in db
206
search db
212
208
Match ?
N
Request Full File content be uploaded
Y
210
Add new entry in db